WHAT IS CLAIMED IS:

1.     An electronic commerce system, comprising a content enhancement module operable to:

analyze product data stored in a seller database using one or more rules, the rules comprising one or more generic rules applying to substantially all seller databases including product data, the generic rules comprising one or more rules from the group consisting of:

a rule indicating that a potential error exists if two products in the seller database have identical product identifiers but have otherwise different product data;
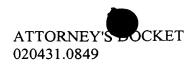
a rule indicating that a potential error exists if two products in the seller database have different product identifiers but have otherwise identical product data; and

one or more rules indicating that a potential error exists if the values associated with particular generic product attributes have a non-numerical format; and

identify one or more potential errors in the product data according to the rules.


2.     The system of Claim 1, further comprising:

a global content directory including a plurality of product classes organized in a hierarchy, each product class categorizing a plurality of products and associated with one or more attributes of the products categorized in the product class, at least one of the product classes having one or more associated pointers that identify one or more seller databases that include product data for one or more products in the class, the product data including values for one or more attributes of the products in the class; and

a search interface operable to communicate a search query for product data to a seller database identified by a pointer associated with a product class selected by a user of the global content directory.

3.      The system of Claim 2, wherein the content enhancement module is operable to perform the analysis and identification in response to a seller requesting that product data in a seller database be associated with one or more classes of the global content directory.

4.      The system of Claim 3, wherein the content enhancement module is operable to perform the analysis using one or more rules associated with the particular classes with which the product data is to be associated.

5.      The system of Claim 2, wherein the generic rules further comprise a rule that generates a product identifier for a product when the product data for that product does not include a product identifier, the generated product identifier comprising the name of a class in which the product is categorized and the values for one or more attributes of the product.

6.      The system of Claim 1, wherein the content enhancement module is further operable to communicate the potential errors to a seller associated with the analyzed seller database.

7.      The system of Claim 1, wherein analyzing comprises communicating one or more search queries to the seller database, each search query formulated according to one or more of the rules.

8.      The system of Claim 7, wherein identifying one or more potential errors comprises identifying product data included in the results of one or more of the search queries.

9.      The system of Claim 1, wherein analyzing comprises accessing and parsing through the product data included in the seller database.

10.     The system of Claim 1, wherein the rules further comprise one or more domain-specific rules that apply only to seller databases including a particular type of product data.

5          11.     The system of Claim 10, wherein the domain-specific rules comprise one or more rules from the group consisting of:

rules indicating that a potential error exists if the value associated with a particular product attribute is outside a specified range of values; and

rules indicating that a potential error exists if the value associated with a
10   particular product attribute is not in a specified format.

12.    A method for content enhancement, comprising:

analyzing, using a content enhancement module, product data stored in a seller database using one or more rules, the rules comprising one or more generic rules applying to substantially all seller databases that contain product data, the generic rules comprising one or more rules from the group consisting of:

a rule indicating that a potential error exists if two products in the seller database have identical product identifiers but have otherwise different product data;

a rule indicating that a potential error exists if two products in the seller database have different product identifiers but have otherwise identical product data; and

one or more rules indicating that a potential error exists if the values associated with particular generic product attributes have a non-numerical format; and

identifying one or more potential errors in the product data according to the rules.


13.    The method of Claim 12, further comprising providing a plurality of users access to an electronic commerce system, the electronic commerce system comprising:

a global content directory including a plurality of product classes organized in a hierarchy, each product class categorizing a plurality of products and associated with one or more attributes of the products categorized in the product class, at least one of the product classes having one or more associated pointers that identify one or more seller databases that include product data for one or more products in the class, the product data including values for one or more attributes of the products in the class; and

a search interface operable to communicate a search query for product data to a seller database identified by a pointer associated with a product class selected by a user of the global content directory.

14.     The method of Claim 13, wherein the analysis and identification are performed in response to a seller requesting that product data in a seller database be associated with one or more classes of the global content directory.

15.     The method of Claim 14, wherein the analysis is performed using one or more rules associated with the particular classes with which the product data is to be associated.

16.     The method of Claim 13, wherein the generic rules further comprise a rule that generates a product identifier for a product when the product data for that product does not include a product identifier, the generated product identifier comprising the name of a class in which the product is categorized and the values for one or more attributes of the product.

17.     The method of Claim 12, further comprising communicating the potential errors to a seller associated with the analyzed seller database.

18.     The method of Claim 12, wherein analyzing comprises communicating one or more search queries to the seller database, each search query formulated according to one or more of the rules.

19.     The method of Claim 18, wherein identifying one or more potential errors comprises identifying product data included in the results of one or more of the search queries.

20.     The method of Claim 12, wherein analyzing comprises accessing and parsing through the product data included in the seller database.

21.     The method of Claim 12, wherein the rules further comprise one or more domain-specific rules that apply only to seller databases including a particular type of product data.

22.    The method of Claim 21, wherein the domain-specific rules comprise one or more rules from the group consisting of rules indicating that a potential error exists if the value associated with a particular product attribute is outside a specified range of values, and rules indicating that a potential error exists if the value associated with a particular product attribute is not in a specified format.

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23. Content enhancement software, the software embodied in a computer-readable medium and, when executed, operable to:

analyze the product data stored in a seller database using one or more rules, the rules comprising one or more generic rules applying to substantially all seller databases that contain product data, the generic rules comprising one or more rules from the group consisting of:

a rule indicating that a potential error exists if two products in the seller database have identical product identifiers but have otherwise different product data;

a rule indicating that a potential error exists if two products in the seller database have different product identifiers but have otherwise identical product data; and

one or more rules indicating that a potential error exists if the values associated with particular generic product attributes have a non-numerical format; and

identify one or more potential errors in the product data according to the rules.

24. The software of Claim 23, further operable to provide a plurality of users access to an electronic commerce system, the electronic commerce system comprising:

a global content directory including a plurality of product classes organized in a hierarchy, each product class categorizing a plurality of products and associated with one or more attributes of the products categorized in the product class, at least one of the product classes having one or more associated pointers that identify one or more seller databases that include product data for one or more products in the class, the product data including values for one or more attributes of the products in the class; and

a search interface operable to communicate a search query for product data to a seller database identified by a pointer associated with a product class selected by a user of the global content directory.

25.     The software of Claim 24, further operable to analyze the product data and identify the potential errors in response to a seller requesting that product data in a seller database be associated with one or more classes of the global content directory.

26.     The software of Claim 25, wherein the analysis is performed using one or more rules associated with the particular classes with which the product data is to be associated.

27.     The software of Claim 24, wherein the generic rules further comprise a rule that generates a product identifier for a product when the product data for that product does not include a product identifier, the generated product identifier comprising the name of a class in which the product is categorized and the values for one or more attributes of the product.

28.     The software of Claim 23, further operable to communicate the potential errors to a seller associated with the analyzed seller database.

29.     The software of Claim 23, wherein analyzing comprises communicating one or more search queries to the seller database, each search query formulated according to one or more of the rules.

30.     The software of Claim 29, wherein identifying one or more potential errors comprises identifying product data included in the results of one or more of the search queries.

31.     The software of Claim 23, wherein analyzing comprises accessing and parsing through the product data included in the seller database.

32.     The software of Claim 23, wherein the rules further comprise one or more domain-specific rules that apply only to seller databases including a particular type of product data.

33.     The software of Claim 32, wherein the domain-specific rules comprise one or more rules from the group consisting of rules indicating that a potential error exists if the value associated with a particular product attribute is outside a specified range of values, and rules indicating that a potential error exists if the value associated with a particular product attribute is not in a specified format.

34.    A system for content enhancement, comprising:

means for providing a plurality of users access to an electronic commerce system, the electronic commerce system comprising:

a global content directory including a plurality of product classes organized in a hierarchy, each product class categorizing a plurality of products and associated with one or more attributes of the products categorized in the product class, at least one of the product classes having one or more associated pointers that identify one or more seller databases that include product data for one or more products in the class, the product data including values for one or more attributes of the products in the class; and

a search interface operable to communicate a search query for product data to a seller database identified by a pointer associated with a product class selected by a user of the global content directory;

means for analyzing the product data stored in a seller database using one or more rules; and

means for identifying one or more potential errors in the product data according to the rules.

35.    An electronic commerce system, comprising:

a global content directory including a plurality of product classes organized in a hierarchy, each product class categorizing a plurality of products and associated with one or more attributes of the products categorized in the product class, at least one of the product classes having one or more associated pointers that identify one or more seller databases that include product data for one or more products in the class, the product data including values for one or more attributes of the products in the class;

a search interface operable to communicate a search query for product data to a seller database identified by a pointer associated with a product class selected by a user of the global content directory; and

a content enhancement module operable to:

in response to a seller requesting that product data in a particular seller database be associated with one or more classes of the global content directory, communicate one or more search queries to the seller database, the search queries formulated according to one or more rules associated with the particular classes with which the product data in the seller database is to be associated;

identify one or more potential errors in the product data by determining the product data that is included in the results of one or more of the search queries; and

communicate the potential errors to a seller associated with the seller database.

36.    A method for content enhancement, comprising:

providing a plurality of users access to an electronic commerce system, the electronic commerce system comprising:

a global content directory including a plurality of product classes organized in a hierarchy, each product class categorizing a plurality of products and associated with one or more attributes of the products categorized in the product class, at least one of the product classes having one or more associated pointers that identify one or more seller databases that include product data for one or more products in the class, the product data including values for one or more attributes of the products in the class;

a search interface operable to communicate a search query for product data to a seller database identified by a pointer associated with a product class selected by a user of the global content directory; and

a content enhancement module;

in response to a seller requesting that product data in a particular seller database be associated with one or more classes of the global content directory, using the content enhancement module to communicate one or more search queries to the seller database, the search queries formulated according to one or more rules associated with the particular classes with which the product data in the seller database is to be associated;

identifying one or more potential errors in the product data by determining the product data that is included in the results of one or more of the search queries; and

communicating the potential errors to a seller associated with the seller database.

37. Content enhancement software, the software embodied in a computer-readable medium and, when executed, operable to:

provide a plurality of users access to an electronic commerce system, the electronic commerce system comprising:

a global content directory including a plurality of product classes organized in a hierarchy, each product class categorizing a plurality of products and associated with one or more attributes of the products categorized in the product class, at least one of the product classes having one or more associated pointers that identify one or more seller databases that include product data for one or more products in the class, the product data including values for one or more attributes of the products in the class; and

a search interface operable to communicate a search query for product data to a seller database identified by a pointer associated with a product class selected by a user of the global content directory;

in response to a seller requesting that product data in a particular seller database be associated with one or more classes of the global content directory, communicate one or more search queries to the seller database, the search queries formulated according to one or more rules associated with the particular classes with which the product data in the seller database is to be associated;

identify one or more potential errors in the product data by determining the product data that is included in the results of one or more of the search queries; and

communicate the potential errors to a seller associated with the seller database.